

REMARKS

A petition to extend the time for response by one (1) month is enclosed herewith.

Status Summary

The Office Action dated October 13, 2006, has been noted and its contents carefully studied. Claims 19-25, 27-29, and 32-39 were previously pending in the application. By this Amendment, claims 19, 20, 23, 32, 37, and 39 have been amended to better clarify and more particularly claim the present invention. No new matter has been added. Reconsideration of the application as amended and based on the remarks set forth hereinbelow is respectfully requested.

Claim Rejections - 35 U.S.C. § 102

Claims 32-36 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,736,971 to McManus (hereinafter "McManus"). These rejections are respectfully traversed.

Preliminarily, it is noted that it is well settled that for a cited reference to qualify as prior art under 35 U.S.C. § 102, each element of the claimed invention must be disclosed within the reference. See Hybritech Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 231 U.S.P.Q. 81 (Fed. Cir. 1986) (stating that "[I]t is axiomatic that for prior art to anticipate under 102 it has to meet every element of the claimed invention"). Accordingly, it is respectfully submitted that McManus does not disclose every element of claims 32-36 and therefore cannot anticipate these claims under 35 U.S.C. §102(b).

By way of background, the present invention relates to a device for loading and/or unloading a transport cargo hold, in particular, on a goods vehicle, and includes at least one transport unit, by which goods units, particularly several thereof, may be simultaneously transport. Specifically, the device of the present

invention includes a conveying unit that is installed in a loading region and by which a plurality of goods units can be conveyed simultaneously from the unloading region into a transport compartment. The conveying unit has a support beam that is mounted through a guide unit and through crossmembers on a building ceiling of a storage building. The conveying unit has a double T section, on which clamping units are fixed one after another in the loading/unloading direction and in which the clamping units have a crossbeam on which legs are mounted such that they can be moved toward each other for gripping the goods units.

Once the goods units are gripped and lifted, the support beam with the guide unit is moved in the crossmembers fixed to the building ceiling, transversely with respect to the crossmembers such that the support beam with the clamping units and the goods units secured therein are introduced into the transport compartment. After the goods units have been inserted into the transport compartment, the goods units are set down on a floor of the transport compartment, and the clamping units are opened. The support beam with the clamping units is then guided out of the transport compartment.

Independent claim 32 has been amended herein to better clarify and more particularly claim the present invention. Specifically, claim 32 now recites an apparatus for at least one of loading and unloading goods units to and from a transport compartment, the apparatus comprising at least two crossmembers and a support beam operatively connected to the crossmembers and extending in a substantially horizontal direction, the support beam being movable with respect to the crossmembers. Claim 32 further recites a crossbeam extending in a direction substantially transverse to the support beam and having a first end and a second end disposed opposite the first end; a first leg connected to the first end of the crossbeam and extending downwardly in a substantially vertical direction from the crossbeam; and a second leg connected to the second end of the crossbeam and extending downwardly in a substantially vertical direction from

the crossbeam, the first and second legs being movable toward one another to clamp the goods units and away from one another to release the goods units. Claim 32 additionally recites a hydraulic cylinder connecting the crossbeam to the support beam, the cylinder being movable between a retracted condition, in which the crossbeam is moved toward the support beam to lift the goods units, and an extended condition, in which the crossbeam is moved away from the support beam to lower the goods units.

McManus discloses a billet grab for lifting and stacking metal billets. The billet grab includes a movable carriage 12 supported on a pair of overhead rails 13 by powered wheels 11. A support frame 20 is attached to the movable carriage 12 and is located vertically downward from it. In operation, the movable carriage 12 is rolled along the rails 13 for locating of support frame 20 above a row of billets which are to be lifted. The Examiner states that McManus discloses a support beam 13, crossbeam 20, first and second legs 28, 32, and a hydraulic cylinder 15. However, Applicants respectfully note that rails 13 of McManus are rigidly fixed similar to prior art lifting systems that involve movement of a carriage along a rail or beam system. There is no disclosure in McManus of, among other things, a support beam operatively connected to crossmembers and being movable with respect to the crossmembers.

Applicants respectfully submit that McManus does not teach or suggest all of the elements recited by amended independent claim 32. Particularly, McManus does not teach or suggest, among other things, an apparatus including at least two crossmembers and a support beam operatively connected to the crossmembers and extending in a substantially horizontal direction, the support beam being movable with respect to the crossmembers.

For the above reasons, Applicants respectfully submit that McManus does not teach or suggest all of the elements recited by amended independent claim 32 and therefore claim 32 and dependent claims 33-36 (which recite additional patentable subject matter) are not anticipated by the cited reference. Applicants

therefore respectfully request that the rejection of claims 32-36 under 35 U.S.C. § 102(b) be withdrawn and the claims allowed at this time.

Claim Rejections - 35 U.S.C. § 103

Claims 19-25, 27-29, and 39 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 3,788,500 to Lemelson ("Lemelson") in view of U.S. Patent No. 5,161,934 to Richardson (hereinafter "Richardson"). Claims 37-38 also stand rejected under 35 U.S.C. 103(a) as being unpatentable over McManus in view of Lemelson. These rejections are respectfully traversed.

Independent claim 19 has been amended herein to better clarify and more particularly claim the present invention. Specifically, claim 19 recites an apparatus for at least one of loading and unloading goods units to and from a transport compartment in a loading and unloading direction, the goods units having a base. The apparatus recited in claim 19 as currently amended includes at least one conveying unit being at least partly inserted into the transport compartment and simultaneously conveying a plurality of goods units therein; wherein the at least one conveying unit has at least two crossmembers connected to a fixed structure and a support beam operatively connected to the crossmembers and being movable with respect to the crossmembers. The at least one conveying unit also has at least two gripping units disposed one after another in the loading and unloading direction for insertion into the transport compartment, each gripping unit including two legs being movable with respect to one another, the goods units being clamped between the two legs when the gripping unit engages the goods units. Claim 19 further recites at least two lifting units for lifting the goods units off of their base in a vertical direction perpendicular to the loading and unloading direction and at least one guide unit operatively connected to the gripping units. The gripping units are mounted via said support beam and at least one guide unit to said crossmembers, and said support beam and said at least one guide unit cooperate together to permit

movement of said gripping units relative to said crossmembers in a transverse direction that is perpendicular with respect to both the loading and unloading direction and the vertical direction.

Independent claim 39 has additionally been amended herein to better clarify and more particularly claim the present invention. Specifically, claim 39 now recites a method of moving goods units having a base between a loading region and a transport compartment, the method comprising the acts of: providing a conveying unit including a movable support beam operatively connected to at least two crossmembers connected to a fixed structure, at least one gripping unit having two legs being movable with respect to one another to engage the goods units, and at least one lifting unit connecting the gripping unit to the support beam. Claim 39 further recites positioning the gripping unit adjacent the goods units in at least one of the loading region and the transport compartment; engaging the goods units with the gripping unit by moving the legs toward one another to clamp the goods units and apply opposing forces on opposite sides of the goods units; and lifting the goods units off of the base with the lifting unit. Amended claim 39 further recites moving the support beam, thereby transporting the gripping unit and the goods unit to the other of the loading region and the transport compartment; lowering the goods units back on the base with the lifting unit; and disengaging the goods units from the gripping unit by moving the legs away from one another to unclamp the goods units.

Lemelson discloses an apparatus for automatically loading and unloading vehicles such as through the use of an overhead monorail trackway for guiding stacker cranes. Referring to Figure 4, the Examiner states that rails 20, 21 extend into a transfer compartment. Applicants respectfully note that Figure 4 of Lemelson and the associated description describes a body 20 such as a vehicle truck trailer having an overhead track 21 permanently supported therein along or immediately beneath the roof of the body 20. The vehicle body 20 is driven into alignment with the end of a loading ramp and the end of a fixed overhead

trackway 15 is provided with a coupling device 22 which slidably engages with the trackway 21 located within the vehicle 20. When such coupling is affected, a stacker crane may be driven into the vehicle for loading or unloading racks therein. There is no disclosure in Lemelson of crossmembers connected to a fixed structure and a support beam operatively connected to the crossmembers and being movable with respect to the crossmembers, wherein the support beam and at least one guide unit cooperate together to permit movement of gripping units relative to the crossmembers.

Richardson fails to overcome the shortcomings of Lemelson. Richardson is directed to handling of articles such as cases or other packages containing bottles or cans and describes a rectangular frame with gates, which is fixed to the forks of a lift truck for gripping a pallet-sized layer of cardboard cases.

Applicants respectfully submit that there is no teaching or suggestion in Lemelson, even if combined with the teachings of Richardson, of the elements recited by amended independent claim 19. Particularly, there is no teaching or suggestion of, among other things, an apparatus including at least two crossmembers connected to a fixed structure and a support beam operatively connected to the crossmembers and being movable with respect to the crossmembers. Lemelson, even if combined with the teachings of Richardson, further does not teach or suggest gripping units being mounted via the (movable) support beam and at least one guide unit to the crossmembers, wherein the support beam and the at least one guide unit cooperate together to permit movement of the gripping units relative to the crossmembers in a transverse direction that is perpendicular with respect to both the loading and unloading direction and the vertical direction.

Applicants additionally respectfully submit that there is no teaching or suggestion in Lemelson, even if combined with the teachings of Richardson, of the elements recited by amended independent claim 39. Particularly, there is no teaching or suggestion of, among other things, providing a conveying unit

including a movable support beam operatively connected to at least two crossmembers connected to a fixed structure and moving the support beam (after lifting of the goods units off of a base with a lifting unit), thereby transporting the gripping unit and the goods unit to a transport compartment.

Claims 37 and 38 depend from claim 32. As described above, Applicants respectfully submit that McManus does not teach or suggest all of the elements recited by amended independent claim 32, particularly there is no teaching or suggestion of, among other things, a support beam operatively connected to crossmembers and being movable with respect to the crossmembers. As such, Applicants respectfully submit that McManus does not teach or suggest all of the elements recited by dependent claims 37 and 38 because each recites additional patentable subject matter.

For the above reasons, Applicants respectfully submit that Lemelson, Richardson, or McManus, either alone or in combination, do not teach or suggest all of the elements recited by amended independent claims 19, 32, or 39 and therefore these claims and the claims that depend therefrom (which recite additional patentable subject matter) are not obvious in view of the cited references. Applicants therefore respectfully request that the rejection of claims 19-25, 27-29, and 37-39 under 35 U.S.C. § 103(a) be withdrawn and the claims allowed at this time.

CONCLUSION

In view of the above, entry of the present Amendment and allowance of claims 19-25, 27-29, and 32-39 are respectfully requested. If the Examiner has any questions regarding this amendment, the Examiner is requested to contact the undersigned. If an extension of time for this paper is required, petition for extension is herewith made.

Respectfully submitted,

Russell W. Warnock

Name of Attorney Signing

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Russell W. Warnock", written in a cursive style.

Russell W. Warnock

Registration No. 32,860

February 13, 2007

BSH Home Appliances Corp.
100 Bosch Blvd
New Bern, NC 28562
Phone: 252-672-7927
Fax: 714-845-2807
russ.warnock@bshg.com